

TSS – Total Suspended Solids

USFWS – United States Fish and Wildlife Service

WRC – North Carolina Wildlife Resources Commission

WS – Water Supply

### 3.0 EXECUTIVE SUMMARY

The goals of the 2007 North Carolina Bay Scallop Fishery Management Plan (FMP) are to implement a management strategy that restore the stock, maintain sustainable harvest, maximize the social and economic value, and consider the needs of all user groups. Plan objectives include: develop an objective management program that restores and maintains sustainable harvest; promote the protection, restoration, and enhancement of habitats and water quality necessary for enhancing the fishery resource; identify, enhance, and initiate studies to increase our understanding of bay scallop biology, predator/prey relationships, and population dynamics in North Carolina; investigate methods for protecting and enhancing the spawning stock; address social and economic concerns of all user groups; and promote public awareness regarding the status and management of the North Carolina bay scallop stock.

Bay scallops are considered an annual crop because of their short life span. Their populations are more affected by environmental conditions such as temperature, salinity, habitat, and water quality. Although fishing does reduce the population size over a fishing season, fishing would not normally reduce year class strength for the following year unless the spawning stock has been reduced below some minimum threshold. Maintenance and improvement of suitable estuarine habitat and water quality are probably the most important factors in providing a sustainable bay scallop stock.

The commercial supply of bay scallops in North Carolina has never been able to keep up with the increasing demand. When bay scallops are available, commercial fishermen can get a good price for them, regardless of the number of pounds they are able to land. Since the fishery occurs in the winter months when other fisheries are slow and is confined to only a small area (Core and Bogue sounds) of the state, limitations in the population are felt strongly in this region. Recreational harvest is allowed at the same time as the commercial season. In recent years, harvest has decreased to essentially no landings because of recruitment failure resulting from a red tide event in 1987, several hurricanes in the 1990's, and cownose ray predation.

Management options such as area and season closures, size and trip limits, gear restrictions, and prohibited take are considered. Research needs on spawning sanctuaries, stock enhancement, genetics, and abundance indicators are addressed. Issues on predation by cownose rays and impacts from weather events are explored. Other